

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	38827	"707"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:01
L2	49356	"709"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:01
L3	12521	"717"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:01
L4	94536	1 or 2 or 3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:01
L5	0	(log43 or journal44) same reorganiz\$4 same first same second	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:02
L6	42	(log\$3 or journal\$4) same reorganiz\$4 same first same second	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:03
L7	354	(log\$3 or journal\$4) same reorganiz\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:03
L8	11	reorganiz\$5 with tablespace with database	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:04
L9	12	reorganiz\$5 with tablespace same database	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:05

EAST Search History

L10	9	4 and (reorganiz\$5 with tablespace same database)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:05
L11	4	(4 and (reorganiz\$5 with tablespace same database)) and @ad<"20010409"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 15:06

	Document ID	Kind Codes	Source	Issue Date	Pages
1	US 20060173938 A1		US- PGPUB	20060803	17
2	US 20050165713 A1		US- PGPUB	20050728	33
3	US 20040221030 A1		US- PGPUB	20041104	15
4	US 20040215632 A1		US- PGPUB	20041028	17
5	US 20020147736 A1		US- PGPUB	20021010	14
6	US 6834290 B1		USPAT	20041221	26
7	US 5887274 A		USPAT	19990323	40
8	US 5758357 A		USPAT	19980526	40
9	US 5517641 A		USPAT	19960514	41

	Title	Abstract
1	Method, apparatus and program storage device for determining an optimal number of tasks during reorganization of a database system with memory and processor constraints	
2	Method for reorganization management in a set of indexed databases of a computer system	
3	System and method for using a buffer to facilitate log catchup for online operations	
4	Method and system for reorganizing a tablespace in a database	
5	System and method for reorganizing stored data	
6	System and method for developing a cost-effective reorganization plan for data reorganization	
7	Restartable fast DB2 tablespace reorganization method	
8	Fast DB2 tablespace reorganization method that is restartable after interruption of the process	
9	Restartable method to reorganize DB2 tablespace records by determining new physical positions for the records prior to moving using a non sorting technic	

	Current OR	Current XRef	Retrieval Classif	Inventor
1	707/206	707/205		Banzon; Arnold T. et al.
2	707/1			Lafforet, Bernard
3	709/224			Huras, Matthew A. et al.
4	707/100			Isip, Amando et al.
5	707/200			Isip, Amando B. JR.
6	707/205	707/101; 707/2		Pugh; Thomas et al.
7	707/202	707/101		Barry; Richard E. et al.
8	707/202	707/101		Barry; Richard E. et al.
9	707/101			Barry; Richard E. et al.

	Document ID	Kind Codes	Source	Issue Date	Pages
10	WO 3085554 A1		EPO	20031016	71
11	WO 3009180 A2		EPO	20030130	5
12	US 6834290 B		DERWENT	20041221	26

	Title	Abstract
10	METHOD FOR REORGANIZATION MANAGEMENT IN A SET OF INDEXED DATABASES OF A COMPUTER SYSTEM	
11	METHOD AND SYSTEM FOR REORGANIZING A TABLESPACE IN A DATABASE	
12	Reorganization plan developing method for database in database management system, involves generating benefit-cost indicator indicating benefit and cost for object reorganization, for each object, to develop reorganization plan	

	Current OR	Current XRef	Retrieval Classif	Inventor
10				LAFFORET, BERNARD
11				ISIP, AMANDO B JR et al.
12				ARONOFF, E M et al.

Google

[Web](#) [Images](#) [Video](#) [News](#) [Maps](#) [more »](#)

a temporal database management main memc

[Advanced Search](#)
[Preferences](#)**Web** Results 1 - 10 of about 311,000 for a **temporal database management main memory prototype**. (0.37 seconds)**Scholarly articles for a temporal database management main memory prototype**[An introduction to database systems: vol. I - Date - Cited by 737](#)[The valid web: An XML/XSL infrastructure for temporal ... - Grandi - Cited by 43](#)[A Distributed Real-Time Main-Memory Database for ... - Lindstrom - Cited by 22](#)**Welcome to IEEE Xplore 2.0: A temporal database management main ...**The **temporal database management main memory prototype** supports valid time (time at which an event happens in the real world) and transaction time (time at ...ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=369272 - [Similar pages](#)**[PDF] A temporal database management main memory prototype - TENCON '94 ...**

File Format: PDF/Adobe Acrobat

A temporal database management system. main memory prototype. Technical report, University. of Arizona, 1991. R. Snodgrans and I. Ahn. **Temporal databases.** ...ieeexplore.ieee.org/iel2/2978/8447/00369272.pdf?arnumber=369272 - [Similar pages](#)[More results from ieeexplore.ieee.org]**[PDF] Main-Memory Management in Temporal Object Database Systems**

File Format: PDF/Adobe Acrobat

Main-Memory Management in Temporal Object Database Systems ... aware of one **prototype**, the POST/C++ **temporal** object store [7], which is ...www.springerlink.com/index/EYVGFM7G52ABQDE8.pdf - [Similar pages](#)**[PS] Database Research at the Indian Institute of Technology, Bombay**File Format: Adobe PostScript - [View as Text](#)The **prototype** has also been used as a testbed for fur-. ther research into various aspects related ... **main-memory database** project was initiated by S. Su- ...www.sigmod.org/record/issues/9603/bombay.ps - [Similar pages](#)**SIGMOD Conference 1979: 23-34**Access Path Selection in a Relational **Database Management System**. ... Michael J. Carey:Query Processing in **Main Memory Database Management Systems**. ...www.informatik.uni-trier.de/~ley/db/conf/sigmod/SelingerACLP79.html - 141k - Nov 10, 2006- [Cached](#) - [Similar pages](#)**ACM SIGMOD Conference 2001: Santa Barbara, CA, USA**Optimizing Multidimensional Index Trees for **Main Memory** Access. 139-150 ... OnSupporting Containment Queries in Relational **Database Management Systems**. ...www.informatik.uni-trier.de/~ley/db/conf/sigmod/sigmod2001.html - 50k -[Cached](#) - [Similar pages](#)[More results from www.informatik.uni-trier.de]**David Toman's Research Statement**The results obtained for **temporal databases** feed directly into the ... control program can be often viewed as a **main-memory database** system tailored to suit ...www.cs.uwaterloo.ca/~david/research.html - 8k - [Cached](#) - [Similar pages](#)**[PDF] Using Logs to Increase Availability in Real-Time Main-Memory Database**File Format: PDF/Adobe Acrobat - [View as HTML](#)with a Pentium Pro 200MHz processor and 64 MB of **main memory**. All trans-. actions arrive at the RODAIN **Database Prototype** through a specic interface ...ipdps.cc.gatech.edu/2000/wpdrts/18000721.pdf - [Similar pages](#)

[doc] [MARGARET H](#)

File Format: Microsoft Word - View as HTML

Principal Investigator on MARS: A Main Memory Database Prototype ... in Temporal Databases," International Workshop on Temporal Representation and Reasoning ...
enr.smu.edu/~mhd/resume.doc - [Similar pages](#)

[Design and implementation of spatiotemporal database query ...](#)

[A temporal database management main memory prototype](#). In: IEEE Region 10th TENCN 9th Annual International Conference, August. 15 Langran, G., 1990. ...
portal.acm.org/citation.cfm?id=781314&
dl=ACM&coll=&CFID=15151515&CFTOKEN=6184618 - [Similar pages](#)

Result Page: 1 [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#)

Try [Google Desktop](#): search your computer as easily as you search the web.

a temporal database management n

[Search within results](#) | [Language Tools](#) | [Search Tips](#) | [Dissatisfied?](#) [Help us improve](#)

[Google Home](#) - [Advertising Programs](#) - [Business Solutions](#) - [About Google](#)

©2006 Google



Google, Inc.

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide


THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Design and implementation of spatiotemporal database query processing system

Source [Journal of Systems and Software archive](#)
Volume 60 , Issue 1 (January 2002) [table of contents](#)

Pages: 37 - 49

Year of Publication: 2002

ISSN:0164-1212

Authors

Dong Ho Kim	Postal Information Technology Development Team, Electronics and Telecommunications Research Institute (ETRI), Republic of Korea
Keun Ho Ryu	Department of Computer Science, School of Electrical and Computer Engineering, Chungbuk National University, Cheongju 361-763, Republic of Korea
Chee Hang Park	Information Support Division, Electronics and Telecommunications Research Institute (ETRI), Republic of Korea

Publisher Elsevier Science Inc. New York, NY, USA

Additional Information: [abstract](#) [references](#) [index terms](#) [collaborative colleagues](#)

Tools and Actions: [Find similar Articles](#) [Review this Article](#)
[Save this Article to a Binder](#) [Display Formats: BibTex EndNote ACM Ref](#)

DOI Bookmark: [10.1016/S0164-1212\(01\)00078-4](https://doi.org/10.1016/S0164-1212(01)00078-4)

↑ ABSTRACT

Researches on spatial and temporal databases have been done independently. In terms of spatial databases, whenever a new object instance is inserted into a database, the old one should be deleted. It stands for the difficulty to manage efficiently the historical information about spatial object that has been changed with temporal evolution. In view of temporal databases, because it did not consider supporting spatial type and operation, it is extremely hard to manage directly spatial objects without any modification. Nevertheless, because these research domains are closely related, an integration field, i.e., spatiotemporal databases, has been launched. Spatiotemporal databases support historical information as well as spatial management for the object at the same time and can deal with geometries changing over time. They can be used in the various application areas such as geographic information system (GIS), urban plan system (UPS), and car navigation system (CNS), and so on. In this paper, we design not only the spatiotemporal query processing (STQP) system, but also implement them. They include a spatiotemporal data model (STDM) that supports bitemporal concept for spatial objects. We also explain a specification of the spatiotemporal database query language, entitled as STQL as well. Compared with the results of the previous researches, we insist that it is the first pilot system in the spatiotemporal database area that supports temporal concept and spatial expression as well.

↑ REFERENCES

Note: OCR errors may be found in this Reference List extracted from the full text article. ACM has opted to expose the complete List rather than only correct and linked references.

1 [Khaled K. Al-Taha , Richard Thomas Snodgrass , Michael D. Soo, Bibliography on spatiotemporal databases, ACM SIGMOD Record, v.22 n.1, p.59-67, March 1993](#)

2 [Walid G. Aref , Hanan Samet, Extending a DBMS with Spatial Operations, Proceedings of the](#)

Second International Symposium on Advances in Spatial Databases, p.299-318, August 28-30, 1991

3 Michael H. Böhlen, Temporal database system implementations, ACM SIGMOD Record, v.24 n.4, p.53-60, Dec. 1995

4 Christophe Claramunt, Marius Thériault, Managing Time in GIS: An Event-Oriented Approach, Proceedings of the International Workshop on Temporal Databases: Recent Advances in Temporal Databases, p.23-42, September 17-18, 1995

5 Eliseo Clementini, Paolino Di Felice, A model for representing topological relationships between complex geometric features in spatial databases, Information Sciences: an International Journal, v.90 n.1-4, p.121-136, April 1996

6 C J Date, A guide to the SQL standard, Addison-Wesley Longman Publishing Co., Inc., Boston, MA, 1986

7 Davis, C., 1994. Object-oriented GIS in practice. In: Proceedings of the Urban and Regional Information System Association.

8 M. J. Egenhofer, Spatial SQL: A Query and Presentation Language, IEEE Transactions on Knowledge and Data Engineering, v.6 n.1, p.86-95, February 1994

9 Martin Erwig, Ralf Hartmut Güting, Markus Schneider, Michalis Vazirgiannis, Abstract and discrete modeling of spatio-temporal data types, Proceedings of the 6th ACM international symposium on Advances in geographic information systems, p.131-136, November 02-07, 1998, Washington, D.C., United States

10 Ralf Hartmut Güting, An introduction to spatial database systems, The VLDB Journal — The International Journal on Very Large Data Bases, v.3 n.4, October 1994

11 R. H. Güting, Gral: an extensible relational database system for geometric applications, Proceedings of the 15th international conference on Very large data bases, p.33-44, July 1989, Amsterdam, The Netherlands

12 Dong Ho Kim, Keun o Ryu, Hong Soo Kim, A spatiotemporal database model and query language, Journal of Systems and Software, v.55 n.2, p.129-149, Dec.29.2000

13 Kim, D., Lee, Y., Kim, J., Ryu, K., 2000b. A spatiotemporal database formal semantic model and algebraic language. In: Proceedings of the International Conference on Communication in Computing (CIC '00), June.

14 Kim, D., Jeon, K., Jeong, J., Kim, K., Ryu, K., 1994. A temporal database management main memory prototype. In: IEEE Region 10th TENCON 9th Annual International Conference, August.

15 Langran, G., 1990. Time in Geographic Information Systems. Taylor & Francis, London.

16 Damir Medak, Lifestyles - An Algebraic Approach to Change in Identity, Proceedings of the International Workshop on Spatio-Temporal Database Management, p.19-38, September 10-11, 1999

17 Nam, K., Kim, D., Ryu, K., 1996. The spatiotemporal relationship operator. In: Proceedings of ITC-CSCC '96, July.

18 Beng Chin Ooi, Efficient query processing in geographic information systems, Springer-Verlag New York, Inc., New York, NY, 1990

19 J. A. Orenstein, F. A. Manola, PROBE Spatial Data Modeling and Query Processing in an Image Database Application, IEEE Transactions on Software Engineering, v.14 n.5, p.611-629, May 1988

- 20 Peuquet, D., Duan, N., 1995. An event-based spatiotemporal data model (ESTDM) for temporal analysis of geographical data. *International Journal of Geographic Information Systems* 9 (1).
- 21 Peuquet, D., Qian, L., 1996. An integrated database model for spatiotemporal GIS. In: *International Symposium on Spatial Data Handling*.
- 22 Dieter Pfoser, Christian S. Jensen, Capturing the Uncertainty of Moving-Object Representations, Proceedings of the 6th International Symposium on Advances in Spatial Databases, p.111-132, July 20-23, 1999
- 23 Schek, H., Waterfeld, W., 1986. A database kernel system for geoscientific applications. In: *Proceedings of the Second International Symposium on Spatial Data Handling*.
- 24 Timos K. Sellis, Research Issues in Spatio-temporal Database Systems, Proceedings of the 6th International Symposium on Advances in Spatial Databases, p.5-11, July 20-23, 1999
- 25 Richard Thomas Snodgrass, The TSQL2 Temporal Query Language, Kluwer Academic Publishers, Norwell, MA, 1995
- 26 Richard Snodgrass, The interface description language: definition and use, Computer Science Press, Inc., New York, NY, 1989
- 27 Yannis Theodoridis, Jefferson R. O. Silva, Mario A. Nascimento, On the Generation of Spatiotemporal Datasets, Proceedings of the 6th International Symposium on Advances in Spatial Databases, p.147-164, July 20-23, 1999
- 28 Vijbrief, T., Oosterom, P., 1992. The GEO++ system: an extensible GIS. In: *Proceedings of the Fourth International Symposium on Spatial Data Handling*.
- 29 Worboys, M., 1994. A unified model for spatial and temporal information. *The Computer Journal* 37 (1).
- 30 Douglas A. Young, The X Window System (2nd ed.): programming and applications with Xt, Prentice-Hall, Inc., Upper Saddle River, NJ, 1994
- 31 Yuan, M., 1996. Temporal GIS and spatio-temporal modeling. In: *International Conference/Workshop Integrating GIS and Environmental Modeling, January*.

↑ INDEX TERMS

Primary Classification:

H. Information Systems

↳ H.2 DATABASE MANAGEMENT

↳ H.2.8 Database applications

↳ **Subjects:** Spatial databases and GIS

Additional Classification:

D. Software

↳ D.2 SOFTWARE ENGINEERING

↳ D.2.12 Interoperability

↳ **Subjects:** Interface definition languages

H. Information Systems

↳ H.2 DATABASE MANAGEMENT

↳ **H.2.3 Languages**

↳ **Subjects:** [Query languages](#)

↳ **H.2.4 Systems**

↳ **Subjects:** [Query processing](#)

General Terms:

[Algorithms](#), [Experimentation](#), [Languages](#), [Measurement](#), [Performance](#)

Keywords:

[GIS](#), [evaluation](#), [query processing](#), [query-language](#), [spatiotemporal database](#), [system](#)

↑ **Collaborative Colleagues:**

Dong Ho Kim: Young So Cho
Hong Soo Kim
Chee Hang Park
Keun Ho Ryu
Keun o Ryu

Chee Hang Park: Dong Ho Kim
Keun Ho Ryu

Keun Ho Ryu:	Young So Cho	Hey Kyu Kim	Hyunyeon Yun
	Jae Du Chung	Oh-Cheon Kwon	
	Anour F. A. Dafa-Alla	Jong Yun Lee	
	Danshim Ha	Jun Wook Lee	
	Yong Jun Heo	Myungjin Lee	
	Bu Hun Hwang	Yong Joon Lee	
	Buhyun Hwang	Kwang Jin Oh	
	Jeong Hee Hwang	Oh Hyun Paek	
	Dong Ho Kim	Ok Hyun Paek	
	Eun Hee Kim	Chee Hang Park	

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2006 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



Welcome United States Patent and Trademark Office

[Search Results](#)[BROWSE](#)[SEARCH](#)[IEEE XPLORE GUIDE](#)[SUPPORT](#)

Results for "((a temporal database management main memory prototype)<in>metadata)"

Your search matched 1 of 1430374 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

[e-mail](#) [printer](#)

» Search Options

[View Session History](#)[New Search](#)

Modify Search

☐ Check to search only within this results set

Display Format:



Citation



Citation & Abstract

[Select All](#) [Deselect All](#)

» Key

IEEE JNL IEEE Journal or Magazine

IEEE JNL IEEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEEE CNF IEEE Conference Proceeding

IEEE STD IEEE Standard

1. **A temporal database management main memory prototype**
Dong Ho Kim; Keun Whan Jeon; Kyung Ja Jeong; Kee Jung Kim; Keun Ho Ryu;
[TENCON '94, IEEE Region 10's Ninth Annual International Conference. Theme: 'Frontiers of Computer Technology Proceedings of 1994](#)
22-26 Aug. 1994 Page(s):391 - 396 vol.1
Digital Object Identifier 10.1109/TENCON.1994.369272
[AbstractPlus](#) | Full Text: [PDF\(368 KB\)](#) IEEE CNF
[Rights and Permissions](#)

Indexed by
 Inspec[Help](#) [Contact Us](#) [Privacy & Security](#)

© Copyright 2006 IEEE -- All Rights Reserved



Welcome United States Patent and Trademark Office

☐ Search Results

BROWSE

SEARCH

IEEE XPLORE GUIDE

SUPPORT

Results for "((implementing temporal integrity constraints using an active dbms)<in>metadata)"

Your search matched 2 of 1430374 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

e-mail
 printer

» Search Options

[View Session History](#)[New Search](#)

Modify Search

((implementing temporal integrity constraints using an active dbms)<in>metadata)

Search >

☐ Check to search only within this results set
Display Format: ☒ Citation ☐ Citation & Abstract

» Key

IEEE JNL IEEE Journal or Magazine

IEEE JNL IEEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEEE CNF IEEE Conference Proceeding

IEEE STD IEEE Standard

[Select All](#)
[Deselect All](#)

- ☐ 1. Implementing temporal integrity constraints using an active DBMS
 Chomicki, J.; Toman, D.;
[Knowledge and Data Engineering, IEEE Transactions on](#)
 Volume 7, Issue 4, Aug. 1995 Page(s):566 - 582
 Digital Object Identifier 10.1109/69.404030
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(1408 KB\)](#) IEEE JNL
[Rights and Permissions](#)
- ☐ 2. Implementing temporal integrity constraints using an active DBMS
 Toman, D.; Chomicki, J.;
[Research Issues in Data Engineering, 1994, Active Database Systems, Proceedings Fourth International Work:](#)
 14-15 Feb. 1994 Page(s):87 - 95
 Digital Object Identifier 10.1109/RIDE.1994.282849
[AbstractPlus](#) | Full Text: [PDF\(708 KB\)](#) IEEE CNF
[Rights and Permissions](#)

[Help](#)
[Contact Us](#)
[Privacy & Security](#)

© Copyright 2005 IEEE - All Rights Reserved

 Indexed by
 Inspec®